

Remarks

Reexamination and reconsideration of the application as amended is respectfully requested.

In Applicant's copy of the application, claim 1 is presented on numbered page 26 and for some reason there appeared to be a hard page return. As such, claim 2 started at the top of page 27 rather than under claim 1 on page 26. Applicants have presented the claims 33-37 as originally numbered, however, it is noted that the Examiner has renumbered these claims as 32-36.

The claims have been amended to address the 35 USC §112, second paragraph rejections regarding antecedency. It is believed that the claims as amended address all these concerns and these rejections are respectfully requested withdrawn.

With respect to the rejection under 35 USC §102 over Kalt, claim 33 (Examiner's claim 32) has been amended to indicate that the polymeric film layer is a dielectric film layer and that the charging is to provide an electret charge on the film layer. Electret charge is defined, for example, in the specification at page 8, lines 13-17 where an electret charge is described as a permanent electrostatic charge imparted to a film where the net electrical charge is close to zero due to charge separation. Kalt neither teaches nor suggests this type of construction or charging. The construction in Kalt are metallized Mylar film layers which are attached to each other via non-conductive adhesive. The adjacent metallized film layers are provided with an active electrical charge by connecting to a high voltage source via the conductive supports 16a and 16b. This would, of course, create a large net electrical charge which is why the film layers are electrically isolated from each other by the nonconductive adhesive.

It is submitted that the combination of Kalt with Landi or Schjeldahl is inappropriate. Kalt discloses a filtration media formed by adhesively laminating metallized Mylar film layers together. The metal layers are typically aluminum. The Schjeldahl patent describes a mechanism for forming thermoplastic bags where two superimposed thin film layers are simultaneously cut and fused together at their edges by a hot wire. It is indicated that a problem with these wires is that they are extremely thin and loses its heat rapidly during cutting operations and as such a specific machine is designed to reheat the wire while it is being used to cut in multiple operations. There is

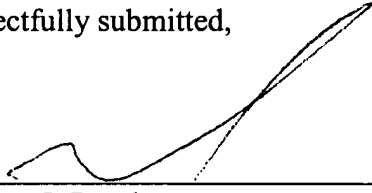
no indication that this hot wire can be used to cut a metal-type film nor would it be obvious to one of skill in the art to apply this in a situation such as described in Kalt to form a three-dimensional filter media array from a series of laminated thermoplastic film layers.

Landi describes cutting a film laminate which is cut while in a compressed condition and subsequently expanded. In contrast, the present invention is directed at cutting a three-dimensional material formed by contoured film layers where there is no need for subsequent expansion of the materials into a final form. This allows the formation of a rigid three-dimensional structure which is self-supporting rather than collapsible as the material described in Landi. The features of the claimed invention in method claim 36 (Examiner's claim 35) are neither taught nor suggested by the references alone or their combination.

In view of the above, further and favorable action in the form of a Notice of Allowance is believed to be in order and such is respectfully requested.

Respectfully submitted,

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Date



William J. Bond
Reg. No. 32,400

Office of Intellectual Property Counsel
3M Innovative Properties Company
P.O. Box 33427
St. Paul, Minnesota 55133-3427
Telephone: (651) 736-4790
Facsimile: (651) 736-3833

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

33. (ONCE AMENDED) A method of forming a filtration media array comprising the steps of:

- (a) forming a contoured polymeric dielectric film layer;
- (b) joining the contoured film layer to a second layer at at least one face of the contoured film layer so as to stabilize the contoured film layer and form flow channels and form a flow channel layer assembly; and
- (c) electrostaticly charging the flow channel layer assembly of the contoured film layer and the second layer with an electret charge to form a charged filtration media array.

34. (ONCE AMENDED) The method of forming a filtration media array of claim 33 further comprising layering [the flow channel layer assembly] multiple charged filtration media arrays formed by steps (a) - (c) so as to create a filtration media array having multiple flow channel layers.

36. (ONCE AMENDED) A method of forming a filtration media array comprising the steps of:

- (a) forming a contoured polymeric film layer;
- (b) joining the contoured film layer to a second layer at least one face of the contoured film layer so as to stabilize the contoured film layer and form a series of adjacent flow channels and form a flow channel layer assembly;
- (c) layering the flow channel layer assembly so as to create a filtration media array having multiple flow channel layers forming fluid pathways through the filtration media array; and
- (d) slicing the filtration media array with a hot wire so as to fuse the adjacent layers forming the filtration media array.